Mitigation Bank Review Process in Minnesota

Phase III: Draft Instrument Full Application

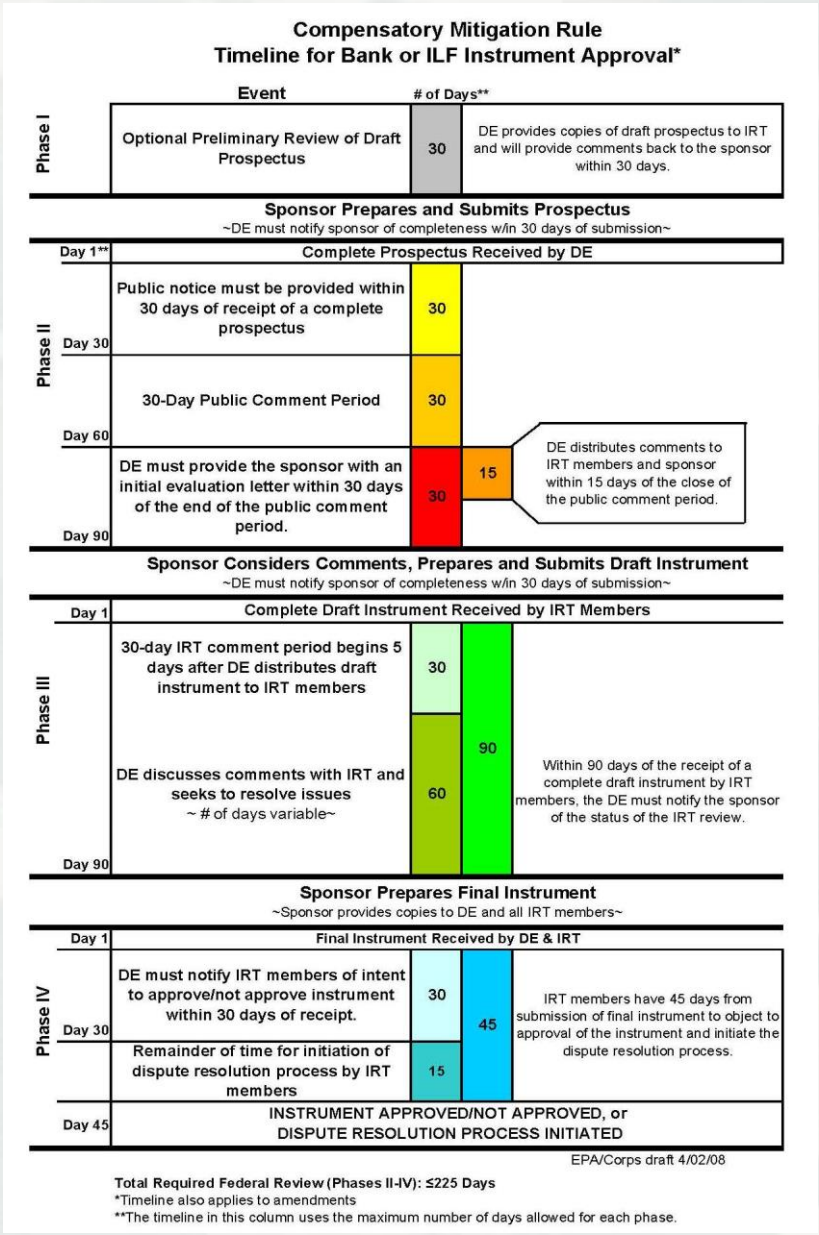
2015 BWSR/St. Paul District Wetland Bank Training

May 28, 2015

US Army Corps of Engineers
BUILDING STRONG®

Presentation Outline

- What is an MBI?
- Complete versus Adequate
- Providing the Best Information Possible
- Dealing with TEP & IRT Comments
- Outcomes from the Phase III process


Compensatory Mitigation Rule
Timeline for Bank or ILF Instrument Approval*
Event
# of Days**
Phase I
Optional Preliminary Review of Draft Prospectus
30
DE provides copies of draft prospectus to IRT and will provide comments back to the sponsor within 30 days.
Sponsor Prepares and Submits Prospectus
~DE must notify sponsor of completeness w/in 30 days of submission~
Day 1**
Complete Prospectus Received by DE
Phase II
Public notice must be provided within 30 days of receipt of a complete prospectus
30
Day 30
30-Day Public Comment Period
30
Day 60
DE must provide the sponsor with an initial evaluation letter within 30 days of the end of the public comment period.
30
15
DE distributes comments to IRT members and sponsor within 15 days of the close of the public comment period.
Day 90
Sponsor Considers Comments, Prepares and Submits Draft Instrument
~DE must notify sponsor of completeness w/in 30 days of submission~
Day 1
Complete Draft Instrument Received by IRT Members
Phase III
30-day IRT comment period begins 5 days after DE distributes draft instrument to IRT members
30
90
DE discusses comments with IRT and seeks to resolve issues
~ # of days variable~
60
Within 90 days of the receipt of a complete draft instrument by IRT members, the DE must notify the sponsor of the status of the IRT review.
Day 90
Sponsor Prepares Final Instrument
~Sponsor provides copies to DE and all IRT members~
Day 1
Final Instrument Received by DE & IRT
Phase IV
DE must notify IRT members of intent to approve/not approve instrument within 30 days of receipt.
30
45
IRT members have 45 days from submission of final instrument to object to approval of the instrument and initiate the dispute resolution process.
Day 30
Remainder of time for initiation of dispute resolution process by IRT members
15
Day 45
INSTRUMENT APPROVED/NOT APPROVED, or
DISPUTE RESOLUTION PROCESS INITIATED
EPA/Corps draft 4/02/08
Total Required Federal Review (Phases II-IV): ≤225 Days
*Timeline also applies to amendments
**The timeline in this column uses the maximum number of days allowed for each phase.

What is an MBI?

- **Mitigation Bank Instrument (MBI):** The document for the establishment, operation, and use of a mitigation bank.

- For the IRT – The MBI is what is approved and the Mitigation Plan is one required part of the MBI (included as an Appendix)
  - The Corps accepts the Full Application document for submittal as the Draft Mitigation Plan

- For the TEP – This is the end of the bank review; the Full Application document is the approved bank plan

Reference 33 CFR 332.8(d)(6) and (7)

What is an MBI?

- Based on the prospectus
- Must describe in detail the physical and legal characteristics and how it will be established and operated
- Phase III is the transition from the general (prospectus) to the specific (final instrument)

Full Application Requirements

WCA Completeness Determination

- Project Sponsor Information
- Project Location
- Maps, Figures & Plans listed on page 2 of the Full Application form
- Review Status & Application History
- Proposed Bank Easement Description
- Existing Conditions
- Historical Conditions
- Project Goals, Expected Outcomes & Crediting
- Ecological Suitability and Sustainability
- Vegetation Plan
- Construction Plan
- Supplemental Information
- Monitoring Plan
- Special Considerations

***all required items are outlined on the Full Application Form

Complete Draft MBI

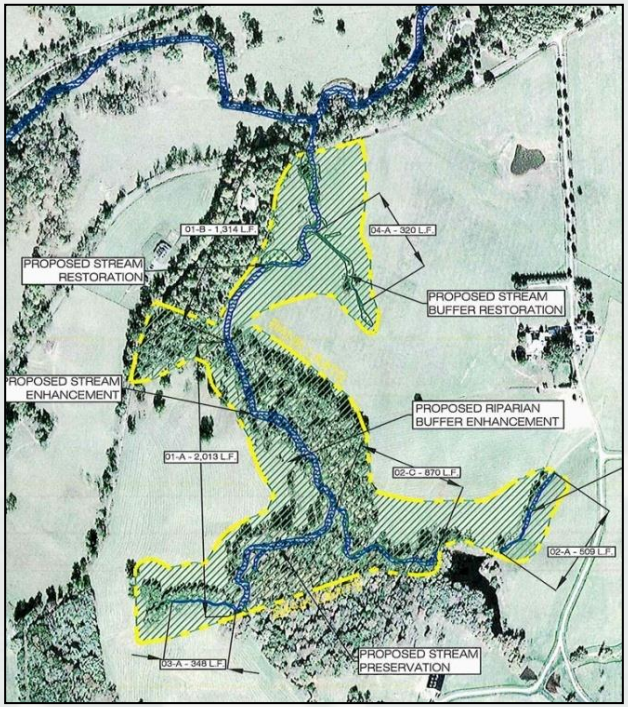
Corps Completeness Determination (33 CFR 332.8(d)(6))

- Description of the proposed geographic service area
- Accounting procedures
- Provision stating legal liability
- Default and closure procedures
- Reporting protocols
- Credit release schedule
- Mitigation plan
- Any other information deemed necessary by the DE

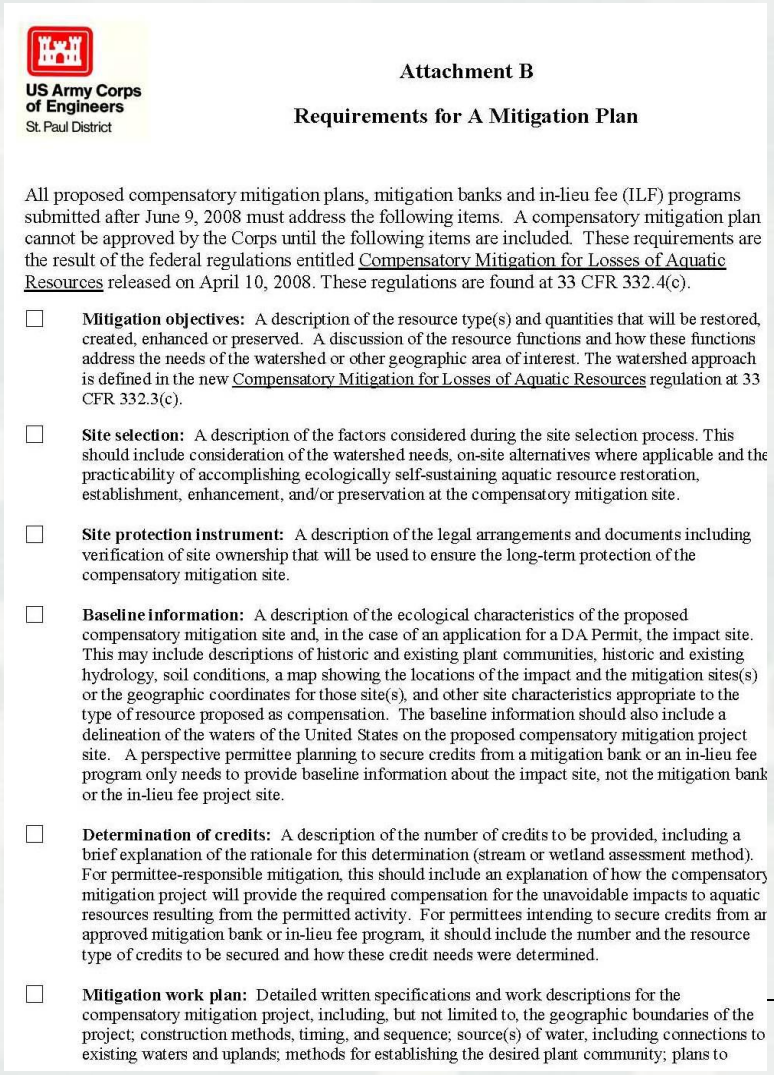
Complete Draft Plan

Mitigation Plan Components (33 CFR 332.4(c))

- Objectives
- Site protection instrument
- Baseline Information
- Work plan
- Maintenance plan
- Performance standards
- Monitoring requirements
- Financial assurances
- Site selection factors
- Credit determination
- Long-term management plan
- Adaptive management plan



Complete Plan Checklist



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St. Paul District

Attachment B

Requirements for A Mitigation Plan

All proposed compensatory mitigation plans, mitigation banks and in-lieu fee (ILF) programs submitted after June 9, 2008 must address the following items. A compensatory mitigation plan cannot be approved by the Corps until the following items are included. These requirements are the result of the federal regulations entitled Compensatory Mitigation for Losses of Aquatic Resources released on April 10, 2008. These regulations are found at 33 CFR 332.4(c).

☐ **Mitigation objectives:** A description of the resource type(s) and quantities that will be restored, created, enhanced or preserved. A discussion of the resource functions and how these functions address the needs of the watershed or other geographic area of interest. The watershed approach is defined in the new Compensatory Mitigation for Losses of Aquatic Resources regulation at 33 CFR 332.3(c).

☐ **Site selection:** A description of the factors considered during the site selection process. This should include consideration of the watershed needs, on-site alternatives where applicable and the practicability of accomplishing ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and/or preservation at the compensatory mitigation site.

☐ **Site protection instrument:** A description of the legal arrangements and documents including verification of site ownership that will be used to ensure the long-term protection of the compensatory mitigation site.

☐ **Baseline information:** A description of the ecological characteristics of the proposed compensatory mitigation site and, in the case of an application for a DA Permit, the impact site. This may include descriptions of historic and existing plant communities, historic and existing hydrology, soil conditions, a map showing the locations of the impact and the mitigation sites(s) or the geographic coordinates for those site(s), and other site characteristics appropriate to the type of resource proposed as compensation. The baseline information should also include a delineation of the waters of the United States on the proposed compensatory mitigation project site. A perspective permittee planning to secure credits from a mitigation bank or an in-lieu fee program only needs to provide baseline information about the impact site, not the mitigation bank or the in-lieu fee project site.

☐ **Determination of credits:** A description of the number of credits to be provided, including a brief explanation of the rationale for this determination (stream or wetland assessment method). For permittee-responsible mitigation, this should include an explanation of how the compensatory mitigation project will provide the required compensation for the unavoidable impacts to aquatic resources resulting from the permitted activity. For permittees intending to secure credits from an approved mitigation bank or in-lieu fee program, it should include the number and the resource type of credits to be secured and how these credit needs were determined.

☐ **Mitigation work plan:** Detailed written specifications and work descriptions for the compensatory mitigation project, including, but not limited to, the geographic boundaries of the project; construction methods, timing, and sequence; source(s) of water, including connections to existing waters and uplands; methods for establishing the desired plant community; plans to

A checklist of required elements for the Mitigation Plan is provided with every Initial Evaluation Letter (at the end of the Prospectus Phase)

While there is a place where every item can be addressed in the State's Full Application Form, the Form does not necessarily use the same language or specify all items required by the 2008 Mitigation Rule.

Complete vs. Adequate

- For the TEP: There is a difference between the information submitted being technically complete to initiate TEP review & 15.99 timelines, and being adequate for TEP approval of the Plan as submitted

- For the Corps: There is a difference between the MBI & Plan being technically complete to initiate IRT review, and having adequate information to result in a Status Update Letter telling the Sponsor their final MBI is likely to be approved

Providing the Best Plan Possible

- Bank proposals evolve throughout the review
  - Details & results from previous phases must transfer
  - Don’t assume we remember all the discussions/details about the project
  - The LGU or Corps PM representative can change
- Policy, guidance, & rules change
- All sites are different
  - What was approved at the last bank you worked on may not work on this site, with this group of reviewers, under different conditions present on this new site

Mitigation Objectives

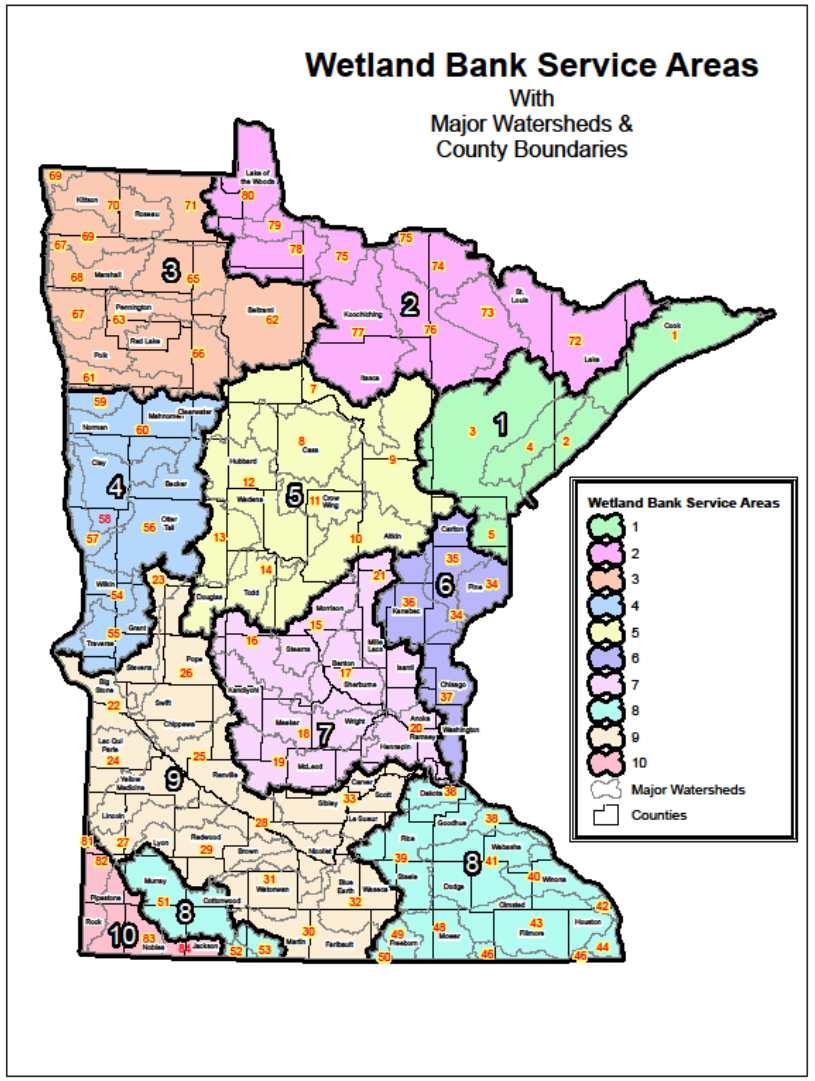
- **Why we ask?** Credits may be used to mitigate for permitted wetland impacts, so the site must reflect the needs of the watershed where it may be used.

- Complete: “To restore 13.09 acres of fresh (wet) meadow and shallow marsh wetlands and 11.06 acres of native prairie upland buffer, providing wildlife habitat, water purification and water storage functions in a watershed with extensive agricultural drainage and runoff.”

Site Selection

- **Why we ask?** Not all sites are appropriate for developing mitigation banks.
  - Ex. If current conditions require extensive engineering and potentially lots of long-term maintenance to make the project viable, then it might not be a good site for a bank.

- **What the Plan needs to address:**
  - Needs of the watershed
  - Whether this site will help meet those needs



Site Protection Instrument/ Ownership & Easement Issues

- **Why we ask?** 2008 Rule & WCA require that banks be protected in perpetuity.

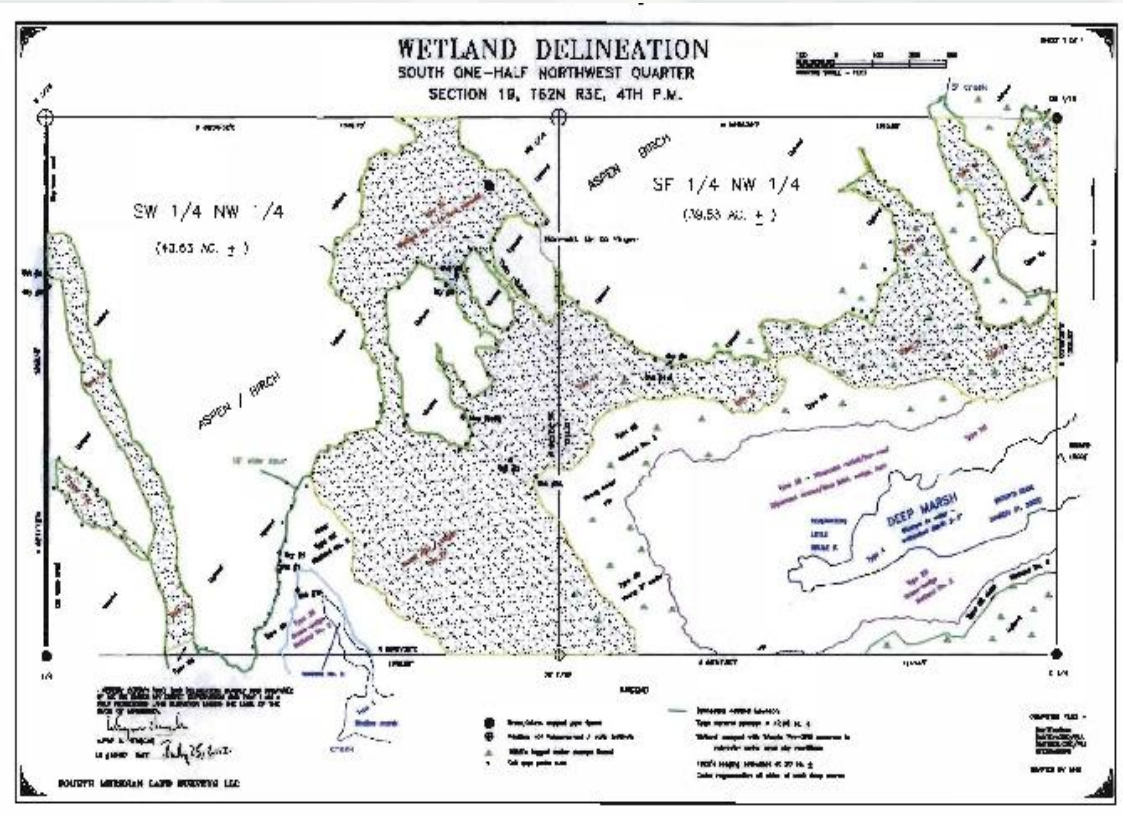
- Include map, descriptions of all excluded areas, discussion of long-term site ownership and the holder of the conservation easement.

- Additional access easement is required if no public access already exists

Baseline Information

- **Why we ask?** To compare with monitoring data & show that the project has resulted in a measurable functional lift. This functional lift determines final credits.

- Plan needs to include:
  - Describe and map pre-settlement conditions to current conditions
  - Wetland delineation
  - Any baseline data collected onsite



Determination of Credits

- **Why we ask?** This ties into various other Plan elements (ex. monitoring requirements, performance standards, credit releases down the line, etc.)

- Full Application credit allocation table references WCA credit terms BUT if seeking federal approval so you must also address Corps credit allocations

- Ensure consistency across documents:
  - Between the Full Application form/Plan and Draft MBI
  - Between the credit allocation table and figures
  - Figures clearly show acreages by wetland type and type of compensation

Maintenance Plan

- **Why we ask?** Need to have an approved plan for maintaining the site during the monitoring period. Otherwise, maintenance would have to be treated as a corrective action and receive prior agency approval.

- Should cover a large range of potential site-specific situations such as:
  - Planting/seeding post-construction
  - Invasive species control
  - Inspection and maintenance of structures

Adaptive Management

- **Why we ask?** Sites are rarely constructed & monitored without issue. It's to both the agency's and the Sponsor's benefit to have an adaptive management plan.
- Plan needs to identify strategies for addressing foreseen & unforeseen issues
- Identify all foreseeable issues (structure failure, unauthorized activities by outside party, etc.)
- Identify responsible party for doing the work

Long-Term Management

- **Why we ask?** The Long-Term Management plan guides decisions for revising the original construction plan and implementing measures to address both foreseeable and unforeseen circumstances that adversely affect the success of the compensatory mitigation project.

- Describe how they'll be addressed
- Identify party responsible
- Be specific

- Identify and describe any necessary, ongoing, long-term management activities required to keep the community sustainable

Vegetation Plan Issues

- Required for both Programs
- Propose and defend a detailed plan (addressing/incorporating past agency comments) with maps
- Who is doing the work and what are their qualifications?

Construction Plan and Engineering Issues

- Propose and defend a detailed plan for how the site will be developed and maintained
- Address & incorporate past agency and BWSR engineering comments
- Who is doing the work and what are their qualifications?

Monitoring, Performance Standard & Credit Release Issues

- Integrally related and tie back to the mitigation objectives
- Ensure that the information provided for one does not conflict with the information provided for others
- While some aspects of each may be consistent across many projects, all projects and sites are different, so too should be their Plans
- What you propose must be specific and measurable

Monitoring

- Monitoring Plan must tie back to performance standards used to determine site success
- Hydrology – Include maps of monitoring wells for hydrology, materials, duration (growing season) & frequency (including methods)
- Vegetation – Describe how vegetation will be monitored (plots, meander, etc.), how monitoring sites will be located, & what will be monitored (relative cover, invasive species, species richness, etc.)
- What's new:
  - Recommended use of reference sites (vegetation, hydrology or both)
  - Recommended use of data loggers for monitoring wells
  - Percent Cover = Relative Cover

Performance Standards

- Must be ecologically-based standards
- Be specific & detailed
- Propose what can actually be achieved, not what was done in the past or what you think the agencies want
- Must be measurable and specific and based upon:
  - Definition of a wetland
  - Types of communities proposed
  - Demonstration of proposed functional lift

Performance Standards

- Credit releases are based on when a site meets specific performance standards; no more “yearly” deposits
- Some standards may need to be met for 2-3 years before credits can be released
- Don’t use MnRAM as part of performance standards, not built for this
- What is a reasonable expectation of performance?
  - Expecting pre-settlement conditions is typically unrealistic
  - Use Best Professional Judgment

Vegetation Performance Standards Should Address:

Four Primary Components:

1. Proportion of total vegetative areal cover by NNI vs. I
2. Number of species (species richness)
3. Dominance by hydrophytes
4. Limit on unvegetated (bare soil) areas

Additional Components for Shrub and Forested Sites:

5. Survival of planted stock (initial growing seasons)
6. Vegetative areal cover and/or number of live stems/ acre by woody species (later growing seasons, includes both planted and volunteer woody species)

Vegetation Performance Standards Should Address:

1) Total Vegetative Cover (relative rover)
   - Native, non-invasive (NNI)
   - Invasive/Exotic (I/E)

2) Species Richness (typically we're not looking for monocultures)

Examples:

1. ≥15 NNI species for a wet meadow planting (seed mix had 25 species)*
2. ≥4 NNI species for a tree planting (6 species of trees were planted)*

* Includes volunteer species

Vegetation Performance Standards Should Address:

3) Dominance by Hydrophytes

- Keep in mind that this is the minimum for identifying a wetland boundary
- A site dominated by purple loosestrife (OBL) would meet this PS
- Other vegetative PS must provide additional restrictions

Vegetation Performance Standards Should Address:

4) Limits on unvegetated areas

- Varies by plant community – mudflats or other unvegetated areas are a natural component of seasonally flooded basins, shallow marshes, vernal pools, floodplain forests, sparsely vegetated concave depressions in hardwood swamps, etc.

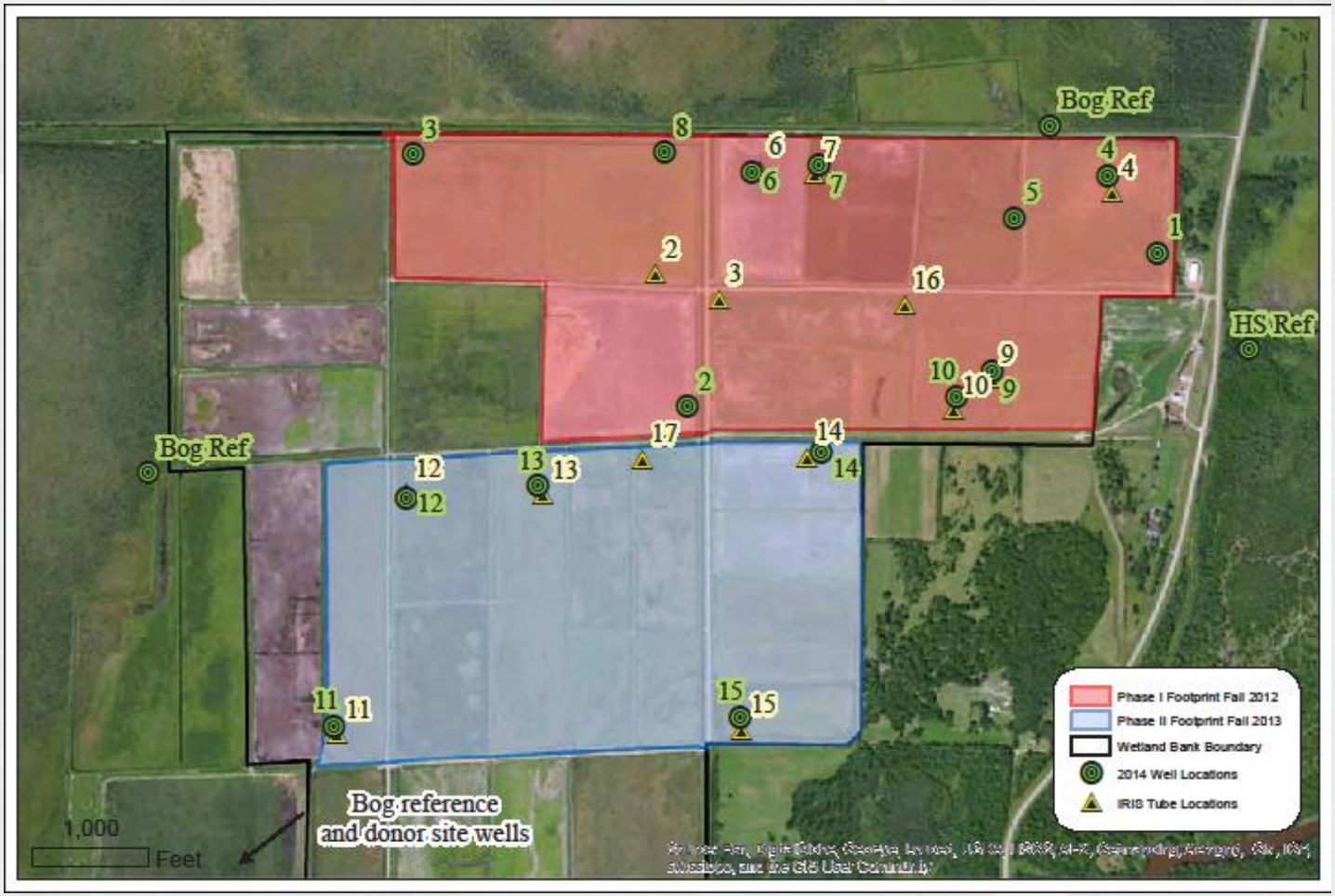
- For other wetland plant communities, if the starting point of the compensation site is bare soils, it is expected that unvegetated areas will be present during the first and possibly through the second growing season.

Example PS: At the end of the second growing season post-restoration, any unvegetated areas >100 sq. ft. in size shall be reseeded/replanted.

Hydrology Performance Standards

- Monitoring wells
  - measure water table, not saturation
  - Identify monitoring locations (map)
- Frequency of monitoring – daily (data loggers)
- Duration – entire growing season (thaw to end of growing season)
- Use of Reference Sites – dealing with wetter or drier than normal conditions
- Consideration of precipitation events during monitoring – map with well data

Well Location Maps

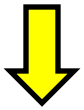


Hydrology Performance Standards

Deep Marshes
Shallow Marshes
Sedge Meadows
Fresh (Wet) Meadows
Wet to Wet-Mesic Prairies
Calcareous Fens
Open Bogs
Coniferous Bogs
Shrub-Carrs
Alder Thickets
Hardwood Swamps
Coniferous Swamps
Floodplain Forests
Seasonally Flooded Basins

Target Hydrology PS have been developed for specific plant communities/soils based on monitoring well data, field observations, Cowardin et al. (1979) and other sources

PS use consecutive days of inundation and/or water table ≤12 inches



monitoring wells with dataloggers are highly recommended

Community Specific Target Hydrology Performance Standards are currently in Draft form

Hydrology Performance Standards

- Drought or other extreme weather events
  - Data Loggers
    - Allows you to track daily water table
    - Allows for comparison with weather events
  - Reference sites
    - Allows for comparison with a comparable, nearby wetland community
    - Allows Sponsors to demonstrate whether the site can be considered to be meeting target hydrology standards

Credit Release Schedule

Tiered Release Credit Schedule

- **Old approach**: credit releases based on “Year 1”, “Year 2”, etc.
- **New approach**: credit releases based on meeting performance standards
  - Using tiers (step-wise increases in metrics of the hydrology and vegetation PS) eliminates “all or nothing” approach
  - Eliminates problem of how much credit to release if some but not all PS are met
  - Provides an incentive to bankers – credits can be released earlier if PS are met

Credit Release Schedule

- There are various appropriate credit release schedules
- Not all projects are the same so the credit release schedule should be project specific
- If you want to propose something unusual, that may be fine, but tell us WHY we should approve your proposal
- Must be tied to meeting a measurable performance standard, NOT by completion of a monitoring period or by year.

Review Process & Comments

- Federal Review:
  - All IRT members review and comment on the DMBI to the Corps
  - St. Paul District reviews internally (PM, Senior Ecologist, upper management)

- State Review:
  - TEP members provide comments and recommendations to the LGU
  - BWSR Central Office provides comments and recommendations to the LGU

- BWSR Central Office comments are often both TEP & BWSR IRT comments

Outcomes

From the Corps: Status Update Letter

- This letter notifies the Sponsor of the status of the Corps review and can take two forms:

    1. Draft MBI is generally acceptable (with or without some revisions)

    2. The bank would most likely not be approved to provide mitigation for Section 404 authorized wetland impacts

- Takes IRT review & comments into consideration; decision is the Corps

- If there are enough issues with the MBI but we do think the Mitigation Plan, with revisions, could be approved, Corps may ask the Sponsor to submit a draft final MBI prior to submittal of the final MBI

Outcomes

From the LGU: Notice of Decision (NOD)

- LGU issues NOD, sometimes with TEP & BWSR Central Office Comments Attached
- LGU either approves or does not approve the Full Application in its current form
- The LGU can conditionally approve the Full Application
  - Such as to allow for additional discussions and seek consensus among the TEP, IRT and Sponsor

Summary

Phase III is detail oriented; general statements and assumptions are no longer sufficient

The Mitigation Plan and MBI must work together and be consistent – they are one document

The goal is to end up with a proposal that satisfies both the TEP and Corps - Consensus is a goal but not a requirement

Questions??